

## **ABSTRACT OF THE DISCLOSURE**

A closed conductive loop for use in planar circuits to realize shunt capacitors instead of conductive patches is disclosed. The closed conductive loop may be formed on a planar substrate or extend to multiple conductive layers in a multi-layer circuit. The use  
5 of closed conductive loops as shunt capacitors offers possibilities of more flexible circuit layout, reduced circuit footprint and comparable or improved performance as compared to using conductive patches as shunt capacitors.